Special Issue

Recent Advances in Graphene-Reinforced Metal Matrix Composites

Message from the Guest Editors

Metal matrix composites dispersively strengthened with graphene and its derivatives are currently of great research interest, and this interest is also fueled by great interest from industry. As there is currently no single generally accepted method for the synthesis of graphene-hardened metal matrix composites, works on new methods for the synthesis of composites based on aluminum and its alloys, as well as magnesium and other materials, are welcome. The purpose of this Special Issue is to present an overview of the current research on promising methods for the synthesis of graphene-reinforced metal matrix composites, as well as the certification of their properties, the modeling of processes occurring at the graphene–metal interface, and the effect of the content and type of graphene particles introduced by various methods on the mechanical, electrical, and thermal properties of composites, as well as their possible applications.

- graphene
- metal matrix
- mechanical properties
- computer modelling
- electrical and thermal conductivity
- corrosion resistance and electrochemical properties

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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